



The Safety Assessment of Management Systems, or SAMS, was first developed in 1997 as a joint industry project intended to bridge from existing research on human and organizational factors to a practical field application in safety and environmental protection. The Marine Facilities Division (MFD) of the California State Lands Commission (CSLC) recognized a need not only to regulate and strictly enforce rules, but also reach out and provide a useful tool for industry customers that would assist them in meeting oil spill prevention objectives.

The SAMS process begins with a kickoff meeting during which MFD specialists schedule on-site interviews with company personnel. These interviews include a cross-section of the organization, from upper-level managers to line-supervisors, administrative staff, operators and contractors. The process usually occurs over a three-to-five day period and every effort is made to minimize the impact on workplace operations. Confidentiality of interviewees, as well as the report product, is assured in order to obtain the openness necessary for a realistic appraisal of the company. After compiling the interviews, MFD specialists return to the company to report results, and clarify any issues contained in the report. Findings from the assessment are presented to the company in a non-regulatory, informal manner. The findings are a means of supporting the company's subsequent, prioritized efforts at safety improvement.

The research-developed SAMS question manual guides the interviews. Company safety and environmental protection program documents are reviewed. Final reports include comments, and a score from "1" (no or little program in place) to "7" (program has elements exceeding standard practice) for each question. The following nine safety areas are targeted by the assessment:

- Management and organizational issues
- Hazards analysis
- Management of change
- Operating procedures
- Safe work practices

- Training and selection
- Mechanical integrity
- Emergency response
- Investigation and audit.

Safety areas were selected from extensive literature on best safety management practices used in high-risk industrial settings.

CSLC has conducted SAMS assessments at eleven facilities, including one reassessment. Feedback from customers has been quite positive, including kudos such as "...found your assessment to be thorough, systematic, fair and accurate", and "Your written review included many insightful observations and suggestions to which we have already responded." One SAMS customer pointed out the service MFD provided at no cost is the equivalent of \$50,000 to \$75,000 costs from a private consulting firm, with a better deliverable. They also reported a 360% improvement in their in-house, monthly safety performance following a SAMS analysis.

This innovative partnership between government and the regulated industry exceeds regulatory requirements and works mutually toward a higher level of environmental excellence. The result? A greater commitment toward spill prevention and safety fostered by proactive public service and industry involvement.

For more than ten years CSLC has had the primary responsibility for oil spill prevention at California marine facilities. California's oil spill legislation requires agencies to provide for the best achievable protection of the environment. Though CSLC is primarily concerned with marine facility operations, the SAMS model has been applied to transportation companies. Assessment questions can be modified and applied to other industries as well.